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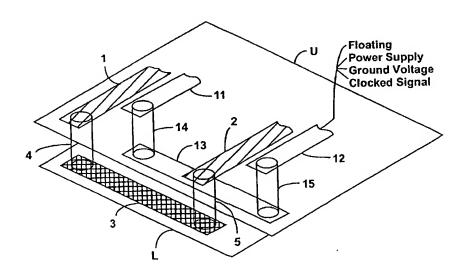
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(54) Title: MULTILAYERED INTEGRATED CIRCUIT WITH NON FUNCTIONAL CONDUCTIVE TRACES



(57) Abstract: A multilayered integrated circuit and a method of designing a multilayered integrated circuit are provided. The circuit comprises at least two conductive layers and non functional conductive lines placed in the conductive layers. The non functional conductive lines are made of a material which is the same as the material in the conductive layers and have dimensions which are the same as the dimension of the material in the conductive layers. The non functional conductive lines perform functions which are unnecessary to the operation of the integrated circuit and are undistinguishable from the functional conductive lines, thus burdening the work of a reverse engineer. The method of designing the multilayered circuit comprises a step of providing a computer generated representation of the non functional conductive lines.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L23/58 H01L H01L23/522 H01L27/02 H01L23/528 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01L Documentation searched other than minimum documentation to the extent that such documents are included in the fields soarched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) WPI Data, EPO-Internal, PAJ, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ' Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X WO 02/43147 A (JANKE MARCUS ; INFINEON 1 - 44TECHNOLOGIES AG (DE)) 30 May 2002 (2002-05-30) page 1, line 12 -page 3, line 23 page 4, line 29 -page 5, line 15 page 6, line 10 -page 8, line 20; figures page 8, 1ine 34 -page 9, 1ine 5 X US 2002/024148 A1 (ITOH NIICHI) 1-25. 31-33, 28 February 2002 (2002-02-28) 37,38, 40-42,44 paragraphs '0006!-'0011! paragraphs '0044!-'0046!; figure 12 paragraphs '0047!-'0050!; figures 1,2 paragraphs '0051!-'0054!; figure 4 --/--X Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the ctalmed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-O' document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. document published prior to the International filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the International search report 14 April 2004 21/04/2004 Name and mailing and less of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Corchia, A Fax: (+31-70) 340-3016

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